

AMENDMENTS TO THE CLAIMS:

Please amend claim 11 and add newly written claims 18-24 as follows.

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-8. (Cancelled)

9. (previously presented) A surveillance system comprising:

(a) a first camera, positioned to have a field of view of a surveillance area, for providing images of said surveillance area,

(b) a second camera for providing a higher quality image of at least a portion of the surveillance area,

(c) an image processing means for making a qualitative assessment of the images provided by said first camera and for causing, when the image quality is inadequate, operation of said second camera to provide a higher quality image of said portion of the surveillance area requiring further analysis,

(d) a data-base comprising at least one data-base source from the group comprising human operators, rule based systems, knowledge based systems, artificial intelligence systems, data-bases and algorithms, and

(e) an image analysis means for
analyzing the content of said higher quality images from said second camera with reference to said data-base,

assessing whether any further analysis of the content of said higher quality images from said second camera is required, and

controlling said second camera to provide further image information of any portion of said surveillance area requiring further analysis.

10. (previously presented) A surveillance system, as in Claim 9, wherein said image analysis means further includes means for:

analyzing the content of said images from said first camera with reference to said database,

assessing whether any further analysis of the content of said images from said first camera is required, and

controlling at least one of said cameras to provide further image information of any part of said surveillance area requiring further analysis.

11. (currently amended) A surveillance system, ~~as in Claim 9, including~~ comprising:

(a) a first camera, positioned to have a field of view of a surveillance area, for providing images of said surveillance area,

(b) a second camera for providing a higher quality image of at least a portion of the surveillance area,

(c) an image processing means for making a qualitative assessment of the images provided by said first camera and for causing, when the image quality is inadequate, operation of said second camera to provide a higher quality image of said portion of the surveillance area requiring further analysis,

(d) a data-base comprising at least one data-base source from the group comprising human operators, rule based systems, knowledge based systems, artificial intelligence systems, data-bases and algorithms;

(e) at least one additional imaging means from the group comprising conventional radar, synthetic aperture radar, infra-red imaging systems, milimetric wave imaging systems, acoustic systems and magnetic systems, and

(f) an image analysis means for analyzing the content of said higher quality images from said second camera with reference to said data-base,

assessing whether any further analysis of the content of said higher quality images from said second camera is required,

controlling said second camera to provide further image information of any portion of said surveillance area requiring further analysis, and~~said image analysis means is additionally arranged to demand~~

demanding further image information from said additional imaging means.

12. (previously presented) A surveillance system, as in Claim 9, wherein said image processing means is pre-programmed to request further analysis of any image having a feature taken from the group comprising certain pre-determined events, features, sequences of actions and images.

13. (previously presented) A surveillance system, as in Claim 12, wherein said image processing means is pre-programmed by said data-base.

14. (previously presented) A surveillance system, as in Claim 12, wherein said image analysis means is pre-programmed to determine a control function response to any image having one of said features.

15. (previously presented) A surveillance system, as in Claim 9, wherein said image analysis means includes a self-learning means for identifying at least one of a pattern of events and pattern of behavior in a previous sequence of said images that has already been analyzed and regarded as unimportant, and for eliminating said unimportant at least one pattern of events and pattern of behavior from further analysis by said image analysis means.

16. (previously presented) A surveillance system, as in Claim 9, wherein said image analysis means includes an artificial intelligence means for identifying one of a pattern of events and pattern of behavior in a previous sequence of said images that has already been analyzed and regarded as unimportant, and for eliminating said unimportant at least one pattern of events and pattern of behavior from further analysis by said image analysis means.

17. (previously presented) A surveillance network comprising a plurality of surveillance systems, as in Claim 9, with each of said first cameras positioned to have a field of view of a portion of a combined surveillance area whereby each of said first cameras provides images of said combined surveillance area, each of said second cameras provides more detailed images of at least a portion of said combined surveillance area thereby enabling an object to be monitored and tracked continuously within said combined surveillance area, and a control means for

handing over tracking of said object from one of said cameras covering one portion of said combined surveillance area to another of said cameras covering an adjoining portion of said combined surveillance area thereby ensuring continuity in the surveillance of said object.

18. (new) A surveillance system comprising:

(a) a first imaging means positioned to have a field of view of a surveillance area, for providing images of said surveillance area,

(b) at least one second imaging means having the ability to provide more detailed information in relation to at least a portion of said surveillance area,

(c) an image processing means for making a qualitative assessment of the images provided by the first imaging means and for causing, when the image is inadequate, operation of said second imaging means to provide more detailed information of said portion of the surveillance area,

(d) a data-base comprising at least one data-base source from the group comprising human operators, rule based systems, knowledge based systems, artificial intelligence systems, data-bases and algorithms, and

(e) an image analysis means for:

analyzing the content of said more detailed information with reference to said data-base,

assessing whether any further analysis of the content of said more detailed information from said second imaging means is required, and

controlling said second imaging means to provide further information of any portion of said surveillance area requiring further analysis.

19. (new) A surveillance system, as in Claim 19, wherein said second imaging means is selected from the group comprising conventional radar, synthetic aperture radar, infra-red imaging systems, millimetric wave imaging systems, acoustic systems, magnetic systems and cameras providing a higher quality image.

20. (new) A vehicle surveillance system comprising:

- (a) a first camera positioned to view a passing vehicle and to produce an image thereof,
- (b) a second camera operable to produce a more detailed image of said passing vehicle,
- (c) an image processing means for making a qualitative assessment of said vehicle image provided by the first camera and for causing, when an image from the first camera is inadequate, operation of the second camera to provide a more detailed image of at least part of the vehicle,
- (d) a data-base comprising at least one data-base source from the group comprising human operators, rule based systems, knowledge-based systems, artificial intelligence systems, data-bases and algorithms, and
- (e) an image analysis means for;
 - analyzing the content of said more detailed vehicle image with reference to said data-base,
 - assessing whether any further analysis of said more detailed vehicle image is required, and
 - controlling at least one of said cameras to provide a further image of at least part of the vehicle.

21. (new) A vehicle surveillance system comprising:

(a) a first camera positioned to view passing vehicles and to produce images thereof,

(b) an imaging means operable to produce a more detailed image of any part of a passing vehicle, said imaging means being selected from the group comprising conventional radar, synthetic aperture radar, infra-red imaging systems, millimetric wave imaging systems, acoustic systems, magnetic systems and cameras producing a high quality image,

(c) an image analysis means for making a qualitative assessment of said vehicle images provided by said first camera and for causing, when an image from the first camera is inadequate, operation of said imaging means to provide a more detailed image of at least part of the vehicle,

(d) a data-base comprising at least one data-base source from the group comprising human operators, rule based systems, knowledge based systems, artificial intelligence systems, data-bases and algorithms, and

(e) an image analysis means for analyzing the content of said more detailed image with reference to said data-base.

22. (new) A vehicle surveillance system, as in Claim 21, wherein said image analysis means is arranged to analyze the content of said more detailed image to identify at least one feature from the group comprising vehicle color, vehicle registration, vehicle speed, and image of its driver.

23. (new) A vehicle surveillance system, as in Claim 21, wherein said image analysis means is also arranged for:

assessing whether any further identification features of the vehicle are required, and
controlling said imaging means to capture such further identification features of the said
vehicle.

24. (new) A vehicle surveillance system, as in Claim 21, wherein said image analysis
means is arranged to assess whether at least one required feature from the group comprising
vehicle color, vehicle registration, vehicle speed and image of its driver has been identified, and
controlling said imaging means to identify said required feature.